IN THE CLAIMS:

Claims 1-96 (canceled)

Claim 97 (new) A method for manufacturing components or their intermediate products, comprising the steps of:

providing a batch of disk-shaped structural members, each structural member being in a horizontal position and within an ultrahigh vacuum treatment reactor;

subjecting said structural members of said batch in said reactor to CVD treatment to form a batch of CVD treated members;

removing said CVD treated members of said batch from said ultrahigh vacuum reactor; and

manufacturing said components or their intermediate products from said CVD treated members.

Claim 98 (new) A method according to claim 97, including the steps of pretreating said structural members before performing said CVD treatment, and transporting said structural members from said pretreating step to said CVD treatment in a vacuum.

Claim 99 (new) A method according to claim 98, further comprising performing said pretreating step upon said structural members in a horizontal position.

Claim 100 (new) A method according to claim 98, further comprising performing said transporting step with said structural members in a horizontal position.

Claim 101 (new) A method according to claim 97, including the steps of pretreating said structural members and then transporting said structural members from said pretreating step to said CVD treatment in a vacuum, said pretreating step comprising cleaning said structural members.

Claim 102 (new) A method according to claim 97, wherein said batch consists of said structural members being horizontal and being stacked vertically one above another and being spaced vertically from each other.

Claim 103 (new) A method according to claim 97, further comprising the step of transporting said structural members, one at a time, into or out of said batch of structural members in said ultrahigh vacuum reactor.

Claim 104 (new) A method according to claim 97, comprising at least one further step of pretreating said structural members before said CVD treatment or subsequently treating said structural members after said CVD treatment, and further transporting said structural members between said at least one further step and said CVD treatment in a vacuum.

Claim 105 (new) A method according to claim 104, including performing said step of further transporting said structural members in a linear or circular path.

Claim 106 (new) A method according to claim 97, including further treating said structural members, at least one of before and after said CVD treatment step, in a reactive,

low-energy, plasma-enhanced treatment process with an ion energy E at the surface of a structural member to be treated, in the range of: $0 \text{ eV} < E \leq 15 \text{ eV}$.

Claim 107 (new) A method according to claim 106, wherein said further treating is a pretreating step before said CVD treatment and comprises a cleaning step.

Claim 108 (new) A method according to claim 107, wherein said cleaning step performed in an atmosphere comprising at least one of hydrogen and nitrogen.

Claim 109 (new) A method according to claim 97, including the steps of loading said structural members into said reactor before said CVD treatment, and removing said treated members from said reactor by unloading said members, and further providing a gas flow within said ultrahigh vacuum reactor during at least one of said loading and unloading steps.

Claim 110 (new) A method according to claim 109, including providing hydrogen as said gas flow.

Claim 111 (new) A method according to claim 97, including monitoring at least one of average temperature and temperature distribution within said ultrahigh vacuum reactor.

Claim 112 (new) A method according to claim 111, including controlling at least one of said average temperature and said temperature distribution by at least one of open-

loop or negative feedback loop control.

Claim 113 (new) A method according to claim 97, including monitoring at least one of average temperature and temperature distribution along said structural members of said batch, during said CVD treatment within said ultrahigh vacuum reactor.

Claim 114 (new) A method according to claim 113, including controlling at least one of said average temperature and said temperature distribution by at least one of open-loop or negative feedback loop control.

Claim 115 (new) A method according to claim 97, further comprising the step of heating the interior of said reactor during said CVD treatment.

Claim 116 (new) A method according to claim 115, including heating the interior of said reactor by providing an further atmosphere around an atmosphere in said ultrahigh vacuum reactor, providing a heating element in said further atmosphere and heating the further atmosphere using the heating element to heat the interior of said reactor.

Claim 117 (new) A method according to claim 97, further comprising the steps of establishing a first atmosphere in said ultrahigh vacuum reactor for said CVD treatment, and establishing a second atmosphere around said first atmosphere.

Claim 118 (new) A method according to claim 117, wherein, at least during said CVD treatment, said second atmosphere is established to be at a lower pressure then said

first atmosphere.

Claim 119 (new) A method according to claim 117, including establishing said first and second atmospheres by separately pumping said first and second atmospheres.

Claim 120 (new) A method according to claim 117, including establishing said first and second atmospheres substantially independently of each other.

Claim 121 (new) A method according to claim 120, including the steps of loaded into and unloaded from said reactor, said members, the method including establishing communication between said first and second atmospheres during at least one of said loading and unloading steps.

Claim 122 (new) A method according to claim 97, further comprising introducing said structural members into said reactor, allowing said structural members to reach thermal equilibrium in said reactor and inletting a gas into said reactor.

Claim 123 (new) A method according to claim 122, wherein said gas is at least one of hydrogen and a process gas.

Claim 124 (new) A method according to claim 97, further comprising heating said structural members by means of heating elements provided at a support for each structural member.

Claim 125 (new) A method according to claim 97, further comprising the step of

providing thermal sensors at a support for carrying each structural member to said reactor, and sensing the temperature of each structural member at the support using the thermal sensors.